REMARKS

Applicant acknowledges receipt of the Final Office Action dated February 24, 2005. The Office Action rejects all pending claims 1–23. Specifically, claims 1-23 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,308,309 issued to Gan et al. ("Gan"). In light of the following remarks, Applicant respectfully requests the Examiner's reconsideration and reexamination of all pending claims.

Independent claim 1 sets forth:

> A computer program product, encoded in computer readable media, the computer program product for designing an integrated circuit chip, comprising:
> a first set of instructions, executable on a computer system, the first set of instructions configured to model an input/output cell located on a perimeter of an integrated circuit, the model of the input/output cell comprising:
> a model of a main cell; and
> a model of a pre-cell; and
> a second set of instructions, executable on the computer system, the second set of instructions configured to model a cover wherein the cover prevents an area occupied by the pre-cell from being used for any other purpose.

In rejecting independent claim 1, the Office Action asserts that Gan teaches instructions configured to model an input/output cell located on a perimeter of an integrated circuit, the model of the input/output cell comprising a model of a main cell and a model of a pre-cell. Specifically, the Office Action equates standard block 210 of Gan with the main cell model of independent claim 1, and equates phantom block 220, 230 with the pre-cell model of independent claim 1. Claim 1 also asserts instructions configured to model a cover that prevents an area occupied by the pre-cell from being used for any other purpose. The Office Action equates the stopper cell 245 of Gan with the cover required in independent claim 1, citing column 4, lines 6-45 of Gan in support thereof. Applicant respectfully traverses this rejection.

For the sake of argument only, Applicant will presume that standard block 210 as shown in Figure 2 equates with claim 1's main cell model, and that phantom block 220 or 230 equates with claim 1's pre-cell model. Column 4, lines 6-45 of Gan teaches that phantom blocks 220 and 230 are defined within respective bounding boxes 235 and 240. It is clear from column 4, lines 29 and 30 that stopper cells 245 are distinct from phantom blocks 220 and 230. More specifically, column 4, lines 29 and 30 set forth:

> Surrounding each of phantom blocks 220 and 230
> are numbers of stopper cells 245.

As can be seen from Figure 2, stopper cells 245 occupy an area on ASIC 200 which is distinct from areas occupied by phantom blocks 220 and 230. Further, Gan teaches the purpose of stopper cells 245 is to preserve the complex routing within ASIC 200 when custom blocks 250 and 255 can be substituted for respective phantom blocks 220 and 230. See Gan, column 4, lines 36-39.

Claim 1 requires that the cover model is used to reserve an area to be occupied by the pre-cell. Presuming stopper cell 245 equates with claim 1's cover model and that phantom block 220, 230 equates with claim 1's pre-cell model, claim 1 can be anticipated by Gan only if stopper cell 245 is used to reserve an area to be occupied by a phantom block. However, Figure 2 and column 4, lines 6-45 make clear that stopper cell 245 is not used to reserve an area for phantom block 220, 230. Accordingly, the cited sections of Gan cannot anticipate independent claim 1.

Independent claim 9 is a method claim which recites modeling an input/output cell, wherein the input/output cell comprises a main cell model and a pre-cell model. Claim 9 in similar fashion to independent claim 1, essentially recites a cover that reserves an area of the

integrated circuit to be occupied by the pre-cell model. Claim 9 was rejected in the Office Action based upon the same reasoning that was used to reject independent claim 1. Applicant traverses this rejection of independent claim 9 for substantially the same reasons set forth above with respect to independent claim 1. Accordingly, Applicant submits that independent claim 1 is patentably distinguishable over the sections of Gan cited by the Office Action.

Independent claim 18 was rejected based upon the same reasoning that was used to reject independent claim 1. Independent claim 18 recites limitations similar to limitations set forth in independent clam 1. Specifically, independent claim 18 recites instructions configured to model an input/output cell, wherein the input/output cell model comprises a main cell model and a pre-cell model. Further, independent claim 18 recites instructions configured to model a cover when the cover prevents an area occupied by the first pre-cell for being used for any other purpose. Because these limitations are substantially similar to the limitations set forth in independent claim 1, Applicant asserts that independent claim 18 is patentably distinguishable over the cited sections of Gan for the same reasons that claim 1 is patentably distinguishable over the cited sections of Gan.

The remaining claims depend directly or indirectly from independent claims 1, 9, or 18. Insofar as these independent claims have been shown to be patentably distinguishable over the cited sections of Gan, it follows that the dependent claims are likewise patentably distinguishable.

CONCLUSION

Applicant submits that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia, 22313-1450, on 5/25/05.

Attorney for Applicant(s) — Date of Signature: 5/25/05

Respectfully submitted,

Eric A. Stephenson
Attorney for Applicant(s)
Reg. No. 38,321
Telephone: (512) 439-5093
Facsimile: (512) 439-5099